REMARKS

Entry of the foregoing, re-examination and reconsideration of the subject matter identified in caption, as amended, pursuant to and consistent with 37 C.F.R. §1.112, and in light of the remarks which follow, are respectfully requested.

By the present amendment claim 2 has been canceled and claims 1 and 11 have been amended to include therein the subject matter of canceled claim 2. Claim 1 was also amended to include blends of carbon black and white filler as specified in claim 5. Claims 1 and 3-11 are now pending in this application.

Claims 1-11 were rejected under 35 U.S.C. §103(a) as obvious over U.S. Patent No. 3,994,842 (Kimura et al) or U.S. Patent No. 5,002,829 (Shibahara) or EP 0,461,464 (Wada et al), each taken in view of U.S. Patent No. 6,435,491 (Blondelet et al) or U.S. Patent No. 6,074,016 (Blondelet et al) for the reasons given in paragraph (4) of the Office Action. Reconsideration and withdrawal of this rejection are respectfully requested for at least the reasons which follow.

The present claims are directed to an elastomeric suspension spring for bearing the load of a motor vehicle and a suspension joint for a motor vehicle which includes said elastomeric suspension spring. The suspension spring is formed of a cross-linked rubber composition based on specified amounts of natural rubber, carbon black of a grade of 600 to 900 and/or inert white filler, and a cross-linking system comprising 0.7 to 1.2 phr sulfur and a cross-linking accelerator, the mass ratio of sulfur to accelerator ranging from 0.15 to 0.50.

As discussed in paragraph [033] of the Specification, when the sulfur/accelerator ratio is within the presently claimed range, a suspension spring is provided having minimum dynamic creep which is a desirable attribute. All of the representative compositions

described in the present Specification (R11, R12, R13) have sulfur/accelerator ratios within the recited range of 0.15 to 0.50.

Turning to the cited references, Kimura et al '842 discloses a cross-linked rubber composition which can be based upon natural rubber, may or may not include a filler (column 2, line 41) and includes vulcanizing agents. In the working examples, 2.5 phr of sulfur are used (column 6, Table 2) and the mass ratio of sulfur to cross-linking accelerator is 2.5. The compositions are not used to manufacture suspension springs. Thus, the differences between the compositions of Kimura et al '842 and the presently claimed invention include not only the use as a suspension spring but also the cross-linking system (amount of sulfur and mass ratio of sulfur/accelerator).

Shibahara '829 discloses a rubber material which can be based upon natural rubber, a reinforcing carbon black in an amount from 10 to 100 phr, a vulcanizing agent in an amount from 0.1 to 10 phr, which can be sulfur, and an accelerator in an amount from 0.1 to 10 phr (column 4, lines 49-54). These features correspond to a mass ratio of sulfur to cross-linking accelerator between 0.01 to 100, which is a particularly large range. In Examples 1-4 (Table 1), 1.4 phr of sulfur are used and the sulfur/accelerator mass ratio is 0.6, both values being outside the ranges of the present claims. The compositions are said to be useful in the manufacture of rubber tires and vibration isolators such as engine mounts.

EP '464 discloses elastomeric compositions intended for use as vibration-isolating materials in automobiles. The compositions may be based on natural rubber and may contain reinforcing fillers and a sulfur-containing curing system. The compositions shown in Tables 1 and 6 have an amount of sulfur and sulfur/accelerator mass ratio outside the ranges of the present claims.

Blondelet et al '491 and '016 disclose vehicle suspension systems where the suspension springs are composed of elastomeric materials. No specific elastomeric compositions are disclosed.

Applicants submit that the combined disclosures of the cited references do not disclose or suggest the presently claimed invention. The present disclosure describes the problems involved and advantages to be attained in preparing suspension springs with minimized dynamic creep and satisfactory torsional endurance [011] which problem is solved by the specific cross-linked rubber compositions whose characteristics are defined precisely in the present claims. Examples of the present application (pages 13 and 14) show clearly the effect of such characteristics notably in comparison with compositions T1, T2 and T3, whose amount of sulfur and mass ratio of sulfur to cross-linking accelerator generally correspond to specific compositions disclosed in Kimura et al '842 or Shibahara et al '829 or EP '464 and which do not provide the unexpected results of the present invention.

For at least these reasons, the §103(a) rejection based on Kimura et al '842 or Shibahara '829 or Wada et al (EP '464), each in view of Blondelet et al '491 and '016 should be reconsidered and withdrawn. Such action is earnestly solicited.

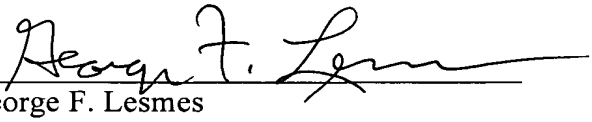
From the foregoing, further and favorable action in the form of a Notice of Allowance is believed to be next in order and such action is earnestly solicited. If there are any

questions concerning this paper or the application in general, the Examiner is invited to telephone the undersigned at (703) 838-6683 at his earliest convenience.

Respectfully submitted,

BUCHANAN INGERSOLL PC

Date: February 23, 2006

By: 

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